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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/813,031	03/31/2004	Hiroki Goko	030712-36	3838

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NIXON PEABODY, LLP
401 9TH STREET, NW
SUITE 900
WASHINGTON, DC 20004-2128

EXAMINER

MEMULA, SURESH

ART UNIT	PAPER NUMBER
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2825

DATE MAILED: 08/15/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/813,031

Applicant(s)

GOKO ET AL.

Examiner

Suresh Memula

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 May 2006 ~~31 May 2006~~ *J'*
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 03/31/2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This FINAL office action is a response to the amendment and remarks filed on 5/22/2006. The remarks are not persuasive; therefore, the rejections based on the prior art of record Tetelbaum is maintained. Claims 1-5 are pending.

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:
The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
2. Claim 5 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
3. In Claim 5, the term "internal" in "internal delay" renders the claim indefinite, since it is unclear as to what the term is meant to encompass.
4. Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. **Claims 1-5 are rejected under 35 U.S.C. 102(e)** as being anticipated by Tetelbaum (US Pub. No. 2005/0050497).
7. As to Claim 1,

a first step for determining a number of clocks different in delay amount {See one or more of: Paragraphs 0049, 0055-0057, 0075, 0077; FIG. 3, 5, and 8-10. Specifically, Paragraph 0054 discloses the multiple clock tree of FIG. 3 is evaluated for clocks different delay (Paragraphs 0055-0057)}, which are used for verification of a circuit design of the semiconductor integrated circuit upon the circuit design thereof (Paragraph 0004, FIG. 1, element #104, and FIG. 11, #1104), and determining delays in the clocks on the basis of pre-set conditions for constraints of timings {FIG. 11. Specifically, FIG. 11 illustrates a flow chart of a method of clock synthesis (Paragraph 0084), which includes goal of zero clock skew (Paragraph 0086) and selected threshold (Paragraph 0092), i.e., pre-set conditions for constraints of timings; and known static timing analysis (Paragraph 0089) which is used for determining clock delay (Paragraphs 0100, 0104, 0112)};

a second step for allocating clocks supplied to respective circuits (Paragraph 0002, and FIG. 3, 5, 7-11, 13, and 16-17); and

a third step for optimizing timings (FIG. 11, elements #1116, #1126) on the basis of a list (FIG. 11, element #1104) obtained by the timing constraint conditions (FIG. 11, elements #1104, #1110, and #1116) and the clock allocation (Paragraphs 0002, 0033; FIG. 11, elements #1112, #1114) and determining whether results of analyses of the respective timings correspond to violation of the constraints of timings (FIG. 11, elements #1116, #1126), wherein the optimization of the timings is repeated according to the constraint violation of the constraints of timings (FIG. 11, elements #1116, #1126).

8. As to Claim 2,

a fourth step for generating the clocks different in the delay amount (Paragraph 0112) for the verification of a layout design of the semiconductor integrated circuit (Paragraph 0004, FIG. 1, element #104, and FIG. 11, #1104);

a fifth step for adjusting skews for each of said clocks (Paragraphs 0101, 0104, 0106, 0112);

a sixth step for adjusting delays (Paragraphs 0101, 0104, 0106, 0112) respectively included in the clocks to the determined clock delays upon the layout design, respectively (Paragraphs 0104, 0106, 0112);

seventh step for making an adjustment to a layout that satisfies the timing constraint conditions upon the layout design (Paragraph 0106, 0114) and determining whether analytical results of the respective timings correspond to the constraint violation (FIG. 11, elements #1116, #1126), wherein the layout adjustment is repeated according to the constraint violation (FIG. 11, elements #1116, #1126).

9. As to Claim 3, adjusting the delay of each of the clocks (Paragraphs 0101, 0104, 0106, 0112) again according to the constraint violation when the constraint violation exists in the third step (FIG. 11, elements #1116, #1126).

10. As to Claim 4, a step for adjusting delays set for said clocks (Paragraphs 0101, 0104, 0106, 0112) according to the constraint violation when the constraint violation occurs in the seventh step (FIG. 11, elements #1116, #1126).

11. As to Claim 5, wherein adjusting the delays (Paragraphs 0101, 0104, 0106, 0112) comprises adding an internal delay at a starting point where data is outputted (Paragraph 0106), and determining the clock delays according to the difference between the added value and the cycle of the clock (Paragraphs 0069, 0106, 0012, 0114, and FIG. 9-13).

Response to Applicant Remarks

12. The applicant states that "Tetelbaum completely fails to disclose at least Applicant's first step for determining the number of clocks different in delay amount and determining delays in the clocks on the basis of pre-set conditions for constraints of timings".

13. The examiner has fully addressed this traverse in the above rejection.

Conclusion

14. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

15. A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within

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TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

16. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Suresh Memula whose telephone number is (571) 272-8046. The examiner can normally be reached on M-F 8am-4:30pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jack Chiang can be reached on (571) 272-7483. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

17. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Suresh Memula

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08/04/2006

PAUL DINH
PRIMARY EXAMINER

A handwritten signature in black ink, appearing to read "Paul Dinh", with a long horizontal flourish extending to the right.